

APPENDIX B

SEPTIC SYSTEMS

Code of County of Lancaster, as amended

SUBDIVISION ORDINANCE AMENDMENT

AS APPROVED BY THE BOARD OF SUPERVISORS ON 10/26/89

Section 5-7 Septic Systems

"Beginning on the 26th day of October, 1989 the Committee shall not approve any subdivision where sanitary sewers are not provided unless the Committee receives evidence that each lot has a valid septic permit and an approved 100% reserve site. The subdivider may be required by the health official to provide the Virginia Department of Health with information on soil studies, percolation tests, topographic studies, and other engineering data as evidence that the land is suitable for septic system, and it's 100% reserve site is not fully contained within the boundaries of each lot in at least 75% of the total lots within the subdivision."

The County is currently seeking legislative approval to make this amendment retroactive to October 1, 1989 as this is the effective date of the Chesapeake Bay Regulations.

This amendment supersedes the present section 5-7 Septic Tanks.

AN ORDINANCE TO AMEND CHAPTER 18.1, CODE OF THE COUNTY OF CHESTERFIELD, 1978, AS AMENDED, BY ADDING A NEW SECTION 18.1-55 AND AMENDING SECTION 18.1-54(b) RELATING TO SIZE OF LOTS SERVED BY SEPTIC SYSTEMS

BE IT ORDAINED by the Board of Supervisors of Chesterfield County:

(1) That Chapter 18.1 of the Code of the County of Chesterfield, 1978, as amended, is amended and reenacted as follows:

Sec. 18.1-54. Generally.

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(b) Residential lots to be served by conventional, private or individual sewerage disposal facilities shall comply with the rules of the state health department and the provisions of section 18.1-55 and Chapter 20, Article VI of this Code.

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Sec. 18.1-55. Size of lots served by conventional septic systems.

In any subdivision utilizing conventional septic systems the average lot size shall be no less than 40,000 square feet, at least 90% of all lots in the subdivision shall be at least 40,000 square feet in size, and no lot shall be less than 30,000 square feet in size. In addition, all lots in the subdivision shall have a minimum lot width of 120 feet measured at the building line. This section shall apply to any property for which residential zoning is

AN ORDINANCE TO AMEND ARTICLE 20 OF THE
CODE OF THE COUNTY OF CHESTERFIELD, 1978, AS AMENDED,
BY ADDING A NEW ARTICLE XI RELATING TO SEPTIC SYSTEMS

BE IT ORDAINED by the Board of Supervisors of
Chesterfield County:

(1) That the Code of the County of Chesterfield, 1978,
as amended, is amended and reenacted by adding the following
article to Chapter 20:

ARTICLE XI. Septic Systems

Sec. 20-194. Septic system. The term "septic system" as
used in this article shall mean a conventional septic tank
and drainfield system with a septic tank and with gravity
feed drainfields 18 inches to 96 inches deep or a pump
system with a septic tank and pump station and with
drainfields 18 inches to 96 inches deep.

Sec. 20-195. Restrictions on use of septic systems.

a) Except as provided in section 18.1-55 of this Code,
any lot which utilizes a septic system and 1) for which
zoning is obtained after February 23, 1989 or 2) which is
recorded after January 1, 1991 shall be no smaller than
40,000 square feet in size and shall have a minimum lot
width of 120 feet at the building line. Except as otherwise
provided herein, all industrial and commercial uses for
which a building permit is issued after the effective date
of this ordinance shall be prohibited from utilizing septic
systems.

(c) No storm drain connections to a septic system shall be permitted.

(d) All septic systems serving a residential dwelling unit, shall be designed and constructed to accommodate the disposal of waste from a garbage disposal unit. Disposal units shall be connected to a septic system by a separate 1250 gallon septic tank installed between the disposal unit and the primary septic tank. Such 1250 gallon tank shall be pumped every two and one-half years after the disposal unit is installed.

(e) No portion of a septic system serving a lot or parcel of property shall be located on another lot or parcel of property, unless such portion is located within a recorded easement.

(f) Any person who constructs a septic system must have a Class B contractors license and be approved by the Health Department.

(g) Any person who constructs a septic system on a lot or parcel of property shall prepare an as-built drawing of the system showing 1) the size, orientation and location of each component of the system, 2) the distances between the system and all structures on the property and 3) the distances between the system and all property lines. The as-built drawing shall be filed with the Health Department within 30 days after construction of the system has been completed.

Sec. 20-197. Prohibited materials in septic systems.

(b) Every septic system shall be kept in good repair so that the system functions as originally designed.

(c) If the county administrator, or the official designated by him, determines that the owner of a septic system has failed to comply with the requirements of subsections (a) or (b) of this section, he shall notify the owner of such determination by certified mail, return receipt requested, sent to the address listed in the real estate tax records. Such notice shall also notify the owner that he is required to correct the violation of subsections (a) or (b), as applicable. If the violation is not corrected within thirty (30) days of receipt of such notice, the county administrator, or his designee, may correct the violation using county forces or a private contractor. The cost of such correction, together with an administrative handling charge of one hundred fifty dollars (\$150.00), shall be billed to the owner and if not paid within thirty (30) days, the cost of correction and handling charge shall be added to, and collected in the same manner as the real estate tax on such property. In addition, the county administrator, or his designee shall certify to the clerk of the circuit court of the county that the cost and charge is unpaid and the clerk shall record such unpaid cost and charge in the judgment lien docket book.

(d) No person shall connect a storm drain to a septic system.

**SUBDIVISION REGULATIONS
FOR
RICHMOND COUNTY, VIRGINIA**

ADOPTED AUGUST 10, 1989

**PREPARED BY THE
RICHMOND COUNTY PLANNING COMMISSION**

Section 4. Surface Drainage Facilities

In accordance with the requirements of this Ordinance and good engineering practice, the subdivision shall be provided with such storm drains, culverts, drainageways, or other works as are necessary to collect and dispose of surface and storm water originating on or flowing across the subdivision, in order to prevent inundation and damage to streets, lots, and buildings in accordance with the approved storm water management plan for the subdivision.

A continuing maintenance plan shall be submitted in accordance with the requirements of Article IV.

Section 5. Erosion and Sedimentation Control

All subdivision plans shall include adequate provision for control of temporary flooding or erosion and sediment control, both during construction and after completion of construction in accord with applicable laws and ordinances and the requirements of Article IV.

Section 6. Shoreline Protection and Waterfront Facilities

Shoreline subdivisions shall be provided with shoreline protection and waterfront facilities in accordance with the provisions of Article IV.

A continuing maintenance plan shall be submitted in accordance with the requirements of Article IV.

Section 7. Water Supply Facilities

Every subdivision with lots of such size as to require a public water supply under State or County regulations shall be provided with a community water supply and distribution system and appropriately spaced fire hydrants. The source of supply may be a county, municipal, or private water system, in which case the distribution system for the subdivision shall meet the standards for such jurisdiction or State standards or it may be an independent source of supply approved by the County and the State, in which case an arrangement, approved by the County Attorney, shall be made for its ownership and operation.

Section 8. Fire Protection

The Agent may require special fire protection measures and facilities as may be reasonably necessary in a particular case, whether or not a public or community water supply is provided.

Section 9. Sanitary Sewerage Facilities

Every subdivision with lots of such size as to require a public sewer system under the provisions of this Ordinance or the zoning regulations or the regulations of the State or the County shall be provided with a community sanitary sewer system connected to a county or municipal system or to an adequate community sewerage disposal plant meeting the requirements of the State and the County. If connected to a county or municipal system, sewers shall be constructed to meet the standards and require-

AGRICULTURAL
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FACT SHEET



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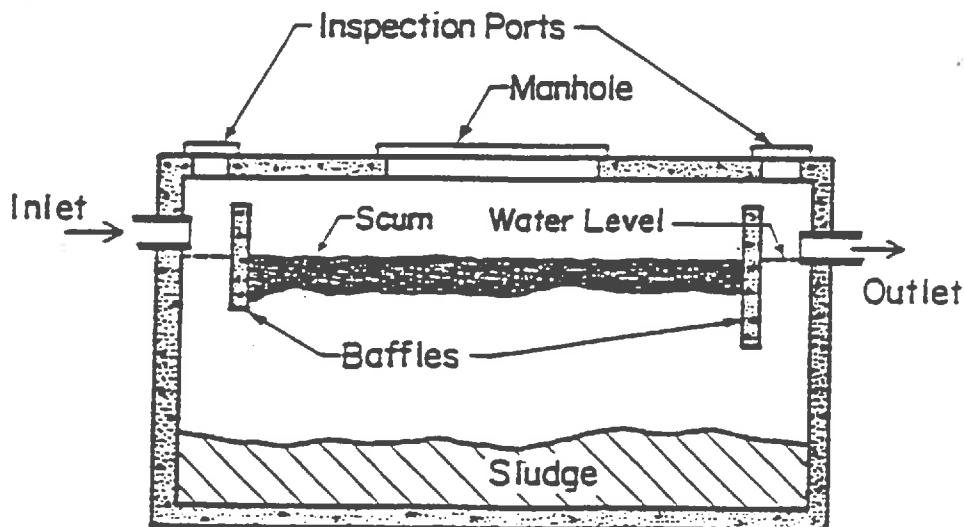
SEPTIC TANK PUMPING

Paul D. Robillard, Water Quality Specialist

The most common wastewater treatment system used in rural areas is the septic tank-soil absorption system. The septic tank removes settleable and floatable solids from the wastewater. The soil absorption field then filters and treats the clarified septic tank effluent. Removing the solids from the wastewater, protects the soil absorption system from clogging and failure. In addition to removing solids, the septic tank also permits biological digestion of a portion of the solids and stores the undigested portion.

The septic tank removes solids by holding wastewater in the tank, which allows the solids to settle and scum to rise to the top. To accomplish this, wastewater should be held in the tank for at least 24 hours. Up to 50% of the solids retained in the tank decompose; the remainder accumulates in the tank. Biological and chemical additives are not needed to aid or accelerate decomposition.

As the septic system is used, sludge continues to accumulate in the bottom of the septic tank. Properly designed tanks have enough space for up to three years safe accumulation of sludge. When the sludge level increases beyond this point, sewage has less time to settle before leaving the tank. As the sludge level increases, more solids escape into the absorption area. If too much sludge accumulates, no settling occurs before the sewage flows to the soil absorption field. To prevent this, the tank must be pumped periodically. The material pumped is known as "septage."



CROSS-SECTION OF SEPTIC TANK

Cleaning Tank

Septic tank pump and haul contractors can clean your tank. It is a good idea to supervise cleaning to ensure that it is done properly. To extract all the material from the tank, the scum layer must be broken up and the sludge layer stirred up into the liquid portion of the tank. This is usually done by alternately siphoning liquid from the tank and reinjecting it into the bottom of the tank. The septic tank should be pumped out through the large central manhole, not the baffle inspection ports. Pumping out a tank through the baffle inspection ports can damage the baffles.

Before closing the tank, check the condition of the baffles. If they are missing or deteriorated, replace them with sanitary tees. It should never be necessary to enter a septic tank. Any work to replace the baffles or repair the tank should be made from the outside. The septic tank produces toxic gases which can kill in a matter of minutes. When working on a tank be sure the area is well ventilated and someone is standing nearby. Never go into a septic tank to retrieve someone who fell in and was overcome by toxic gases without a self-contained breathing apparatus (SCBA). If a SCBA is not available, call for emergency services and put a fan at the top of the tank to blow in fresh air.

To facilitate future cleaning and inspection, install risers from the central manhole and inspection ports to the surface before burying the tank. Also mark the location of the tank, so it can be easily located.

Summary

The septic tank is only one part of an on-site wastewater system. It is designed to remove solids to protect the soil absorption system, provide for the digestion of a portion of those solids, and store the remaining solids. Biological and chemical additives are not needed to aid or accelerate decomposition. Garbage grinders are also not recommended, because they impose an additional solids load on the system. Solids must be removed periodically to keep them from entering the soil absorption system. For a properly designed septic tank, the tank should be inspected and pumped every 1 to 5 years.